

**ABSTRACT**

5 The invention relates to a micro-engineered reactor device comprising a closely coupled reactor and electrochemical cell, and a method of using such a reactor for the synthesis of organic compounds by a process involving an electrochemical reaction. The synthetic processes are of a type in which a source material is electrochemically converted to a reactive primary product which is exposed at a reaction region within a channel, or chamber, to a precursor material so that the primary product and precursor material react to generate  
10 a secondary product.

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